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The Evolution of Entrepreneurship Activity Indicators in Two European Countries

Nelu Eugen Popescu*

Lucian Blaga University of Sibiu, Faculty of Economic Sciences, 17 Dumbrăvii Avenue, Sibiu 550324, Romania

Abstract

The aim of this paper is to present how the economic situation affected the evolution of the entrepreneurial activity in Romania and Hungary in the last few years including the in the post-crisis period. We will have a look at the attitudes, perceptions and aspiration towards entrepreneurship in Romania and Hungary and will briefly outline some of the similarities and differences between the indicators in these two European countries based on the GEM framework.

The paper will provide a brief overview of some entrepreneurship related indicators and will be used for an future introductory analysis, which is meant to provide the basis for further investigation in order to thoroughly understand the connection between entrepreneurship and economic development

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1. Introduction

The word - “Entrepreneurship” - widely used nowadays is a term employed to define a concept, which enjoyed a special attention in the specialized literature in the last years but with a long history. The answer to questions like: What is entrepreneurship and who is an entrepreneur? is not obvious... these 2 terms largely used and disputed today with a long history, probably as long as the humankind itself.

The entrepreneurship concept remained elusive despite the attention paid to it by scholars in the last years.

* Corresponding author. Tel.: +40-742012260.

E-mail address: eugen.popescu@ulbsibiu.ro

Entrepreneurship has a lot of ways in which is defined and Morris (1998) identified a number of 77 definitions, Gartner (1990) after reviewing the literature identified 90 attributes associated with the entrepreneur. This facts demonstrates the multidisciplinary character of the concept but at the same time underlines that this characteristic represents an obstacle in studying and researching this phenomenon due to the lack of a generally accepted definition of this 2 terms – entrepreneur & entrepreneurship.

Table 1. Entrepreneurship definitions.

Author	Definitions
Drucker (1985)	„Entrepreneurship is an act of innovation that involves endowing existing resources with new wealth-producing capacity”
Stevenson (1985)	“Entrepreneurship is a process by which individuals pursue and exploit opportunities irrespective of the resources they currently control.”
Gartner (1988)	“Entrepreneurship is the creation of organizations, the process by which new organizations come into existence”
Timmons (1997)	“Entrepreneurship is a way of thinking, reasoning and acting that is opportunity driven, holistic in approach and leadership balanced.”
Venkataraman (1997)	„Entrepreneurship is about how, by whom and with what consequences opportunities to bring future goods and services into existence are discovered, created and exploited.”

Source: Hans Landstrom – Pioneers in Entrepreneurship and Small Business Research 2005

Entrepreneur is a word of french originis (from „entreprendre”) with the meaning of undertaking (something, an activity) and could be found since 1437 in the “Dictionnaire de la langue francaise”.

Table 2. Entrepreneur definitions.

Author	Definitions
Schumpeter (1939)	“The entrepreneur is an innovator introducing new combinations of resources.”
Cole (1959)	... “An individual or group of individuals who initiate, maintain or expand a profit-oriented business unit for production or distribution of economic goods and services.”
Shapero (1975)	“The entrepreneur takes initiatives, organizes social and economic mechanisms and accepts the risk of failure.”
Brockhaus (1980)	... “A major owner and manager of a business venture”
Nicolescu	„The entrepreneur can be defined as a persons that initiates or develops a business venture which implies new activities, the entrepreneur is being completely involved in this activities with the goal of obtaining a profit.”
Bygrave and Hofer (1991)	“An entrepreneur is someone who perceives an opportunity, and creates an organization to pursue it. This definition implies that new venture creation is the essence of entrepreneurship.”

Source: adaptation from Hans Landstrom Pioneers in Entrepreneurship and Small Business Research 2005

A vast variety is also met not only in the definitions of the concept but also in the defining which components of the entrepreneurship has a stronger impact on the economy. For some authors the innovation activity is more important than the equilibrium or management activities but others, on the contrary, consider more important exactly the management skills. Even if entrepreneurship is considered a “buzzword” in the public debates, a coherent definition of entrepreneurship has not yet emerged (Iversen et al., 2011).

When did entrepreneurship emerged? Very difficult to give an exact date, but the first mention in an academic paper belongs to Richard Catillon, 1775 in his „Essai sur la nature du commerce en général”. But if we refer to the activity itself it is probably as old as the world. The concept evolved in time and changed in the way it was perceived by scholars in its evolution in economic theories.

As mentioned by Gheorghe Savoiu (2009) „the entrepreneur is the actor and entrepreneurship is the act, and the world is the scene”. „The outcome of the actor and the act is called the enterprise” (Dr. Jyotsna Sethi)

As mentioned above the field of entrepreneurship needs a multidisciplinary approach and as noted by Simon C. Parker there is an agreement between the researchers studying entrepreneurship that there is no science that has the „monopoly of wisdom” over it. (Parker, 2005). Despite all this debate about entrepreneurship most authors consider it a key economic factor and the entrepreneur is central to economic growth (Parker, 2009).

2. Data used

The data used in this article had its principal source in the Adult Population Survey database for the two countries analyzed Romania and Hungary from Global Entrepreneurship Monitor (GEM) on a period of 5 years between 2007-2012. I mention that for Hungary data were available from 2001 but not for Romania, which started gathering data only starting with 2007.

An additional source of data was OECD (Organization for Economic Co-operation and Development): OECD Structural and Demographic Business Statistics (SDBS) Database. OECD – Entrepreneurship at a glance 2012.

GEM is an acronym for Global Entrepreneurship Monitor, which is a research project, carried out in order to better understand the intricate relationship and connections between entrepreneurship and economic development. It is argued that the widely acknowledged phenomenon of entrepreneurship “is one of the most important forces shaping the changes in the economic landscape” (GEM – Entrepreneurship in Romania 2010 country report. Dumitru Mătiș, Ágnes Nagy, Tünde-Petra Petru, Annamária Benyovszki).

How does GEM define the entrepreneur and entrepreneurship? As presented above the entrepreneurship is a multifaceted phenomenon and could have different significance and that is way it is very important for a research to establish from the start the meanings and content of the concepts it operate with.

Global Entrepreneurship Monitor (GEM) operationalizes entrepreneurship as: “any serious attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business” (Bosma, Wennekers & Amorós, 2012).

GEM defines the term “entrepreneur” as “an adult who is engaged in setting up or operating a new venture which is less than 42 months old”.

The index of “Total Entrepreneurial Activity” (TEA) which is the primary tool used by GEM to measure entrepreneurship is defined as the proportion of the population who are entrepreneurs, it is a indicator of dynamic entrepreneurial activity and it takes into consideration both start-up businesses or nascent entrepreneurs and new firms (0 to 42 months old) in the population segment ranging from 18 to 64 years.

The sample size of GEM Adult Population Survey (APS) for Hungary had a total of 7501 respondents and for Romania had a total of 8,580 respondents in 4 years. The survey was conducted either by telephone or face-to-face interview with persons of the adult population aged between 18 and 64 year.

Table 3. The size of the sample.

Years	2007	2008	2009	2010
Respondents				
Romania	2,046	2,206	2,093	2,235
Hungary	1,500	2,001	2,000	2,000

Source: Adult Population Survey Sample Sizes 2001-2010

In the following section of the paper we will present a brief overview of some of the most important indicators used by GEM to measure attitudes and perceptions as well as aspirations and the entrepreneurial activity.

3. 2007-2012 evolution of entrepreneurial activity in Romania and Hungary

3.1. Improvement-Driven Opportunity Entrepreneurial Activity

The improvement driven opportunity entrepreneurial activity had a small decline starting with 2008 in Hungary. Romania instead had a sharp increase from 2009 to 2010 when it surpassed the value of the indicator in neighbor country. Both countries had a decrease in 2011 but started recover with 2012. Even if the economic crisis may offer more opportunities to entrepreneurs in terms of reduced competition or lower cost with employees the rate decreased in the first period after the crisis (2008,2009, see figure 1) but 2012 marked a year of increase in the rate reaching 35% in Hungary and 38% in Romania.

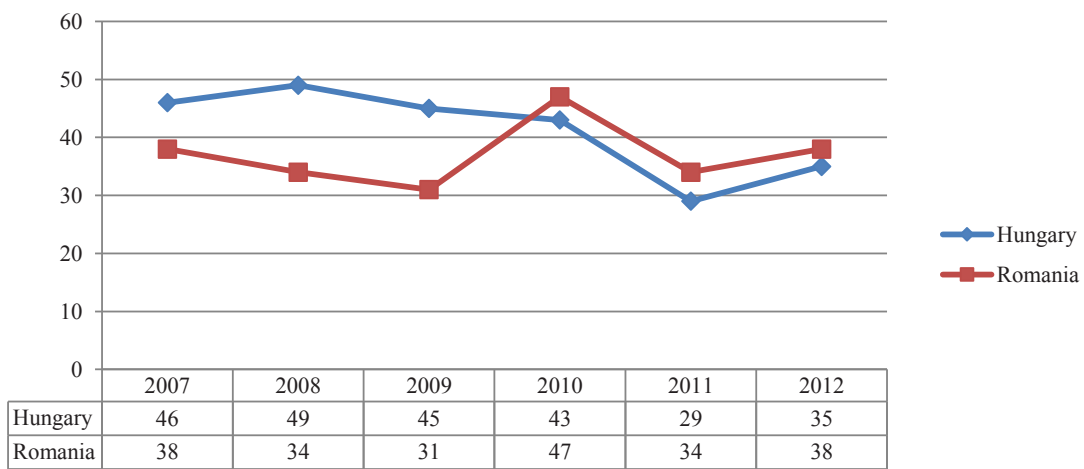


Figure 1. Improvement-Driven Opportunity Entrepreneurial Activity: Relative Prevalence. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

3.2. Necessity-Driven Entrepreneurial Activity

2008 marked a big increase in the rate both in Hungary and Romania, the lack of jobs on the market due to the effect of crisis may drive people to start new businesses and become self-employed as an alternative to being unemployed so the increase of the rate in 2008 to 34% Romania and 28% in Hungary could be a direct effect of the economic downturn.

2011 marked as well an increase in both countries reaching 31% in Hungary and 41% in Romania. But 2012 marked a big change for Romania where the rate went to 24% with 7 percent less than in Hungary for the first time after 4 years.

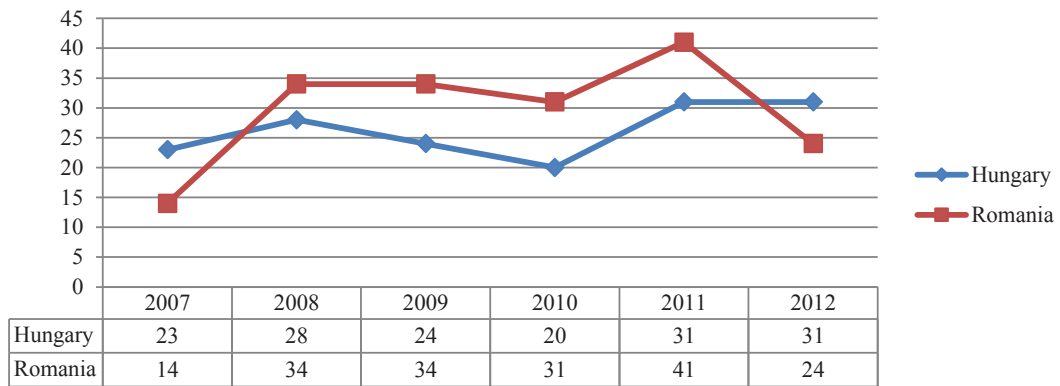


Figure 2. Necessity-Driven Entrepreneurial Activity. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

3.3. New Business Ownership Rate

After the decrease from 2009 to 2010 in both countries, 2011 marked a year of a considerable increase in the new business ownership rate up 4,5% in Romania overpassing the rate in Hungary with almost 3%, the rate in Hungary started to increase one year later reaching 3,6% very close to indicator value in Romania. The increase in the value of this indicator in the last years could be a good sign that the business are getting over the negative effects of the economic activity decline.

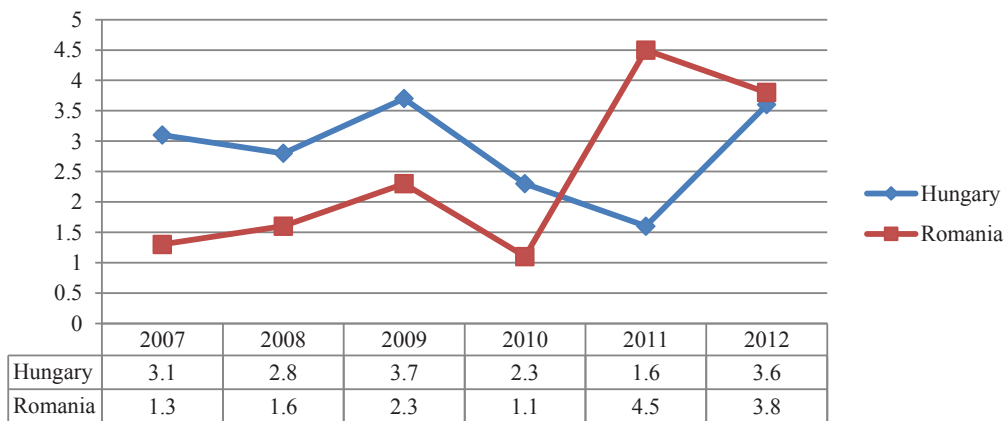


Figure 3. New Business Ownership Rate. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

3.4. Nascent Entrepreneurship Rate

Romania marked a continuous increase in the rate of persons who are actively involved in setting up a business up to 2011 when it manage to surpass the rate in Hungary (Romania 5,6%, Hungary 4,8%). In 2012 it has a small decrease to 5,5% and Hungary overpassed reaching 5,8% after a period of 3 years of decline. The continuous growth trend in Romania is a good sign for the economy even though only a small percent of the start-up will reach success and will be viable on the long run, the creation of new companies has a good impact over the economy.

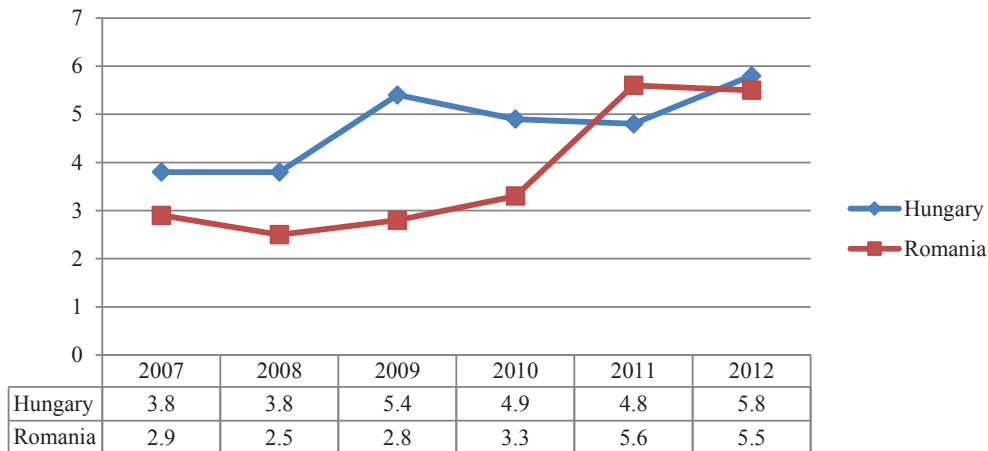


Figure 4. Nascent Entrepreneurship Rate. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

4. 2007-2012 evolution of attitudes and perceptions toward entrepreneurship in Romania and Hungary

4.1. Entrepreneurial Intention

The entrepreneurial intention (individuals who intend to start a business in the next 3 years) in Romania dropped from 11.7% in 2007 to 6.3% in 2009, the effects of the crisis affected in a negative way the intention, but in 2012 the rate tripled after 2 years of consecutive growth, which could mean good news in the case that the intention materialize. In Hungary the rate had an increase in the period 2008-2011, with 2011 as a peak (19.5%) but it had a fall in 2012 to 13%.

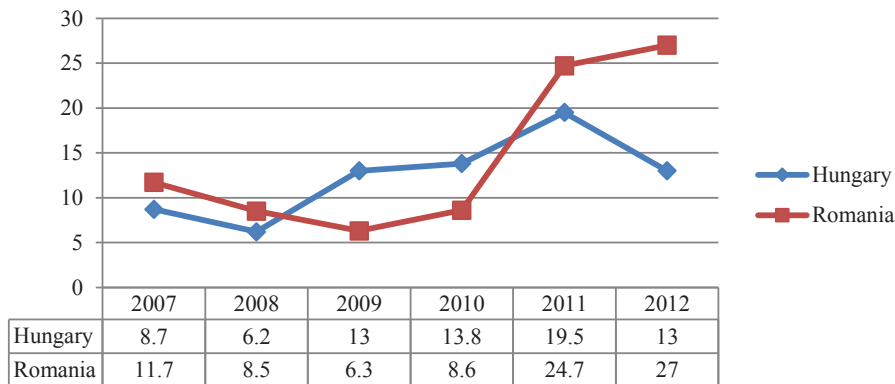


Figure 5. Entrepreneurial Intention. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

4.2. Entrepreneurship as Desirable Career Choice

Entrepreneurship as a career path had a downturn in 2009 related to 2007 (mention that 2008 data were not available for Romania) but the rate continued to increase in 2010 through 2012.

2009 was a year of downturn for the rate in Hungary as well; followed by an increase in the next year reaching 55% afterwards a declining trend continued reaching 41% a figure closed to the one in 2009.

During crisis people tend to reach for a safe income in the form of a secure employment and wage rather than starting a new business which means bearing the risk and uncertainty that come with creating a new business venture. According to Eurobarometer (Entrepreneurship in the EU and beyond Analytical report December 2009) a regular, fixed income was mentioned by 70% of the Hungarians as a reason for preferring employee respective, fixed working hours was mentioned as another factor for employment preference by Hungarians (39%) and stability of employment. The main reasons for Romanian respondents preference for employee status are regular fixed income (45%), stability of employment (29%) and lack of finance for self-employment (32%).

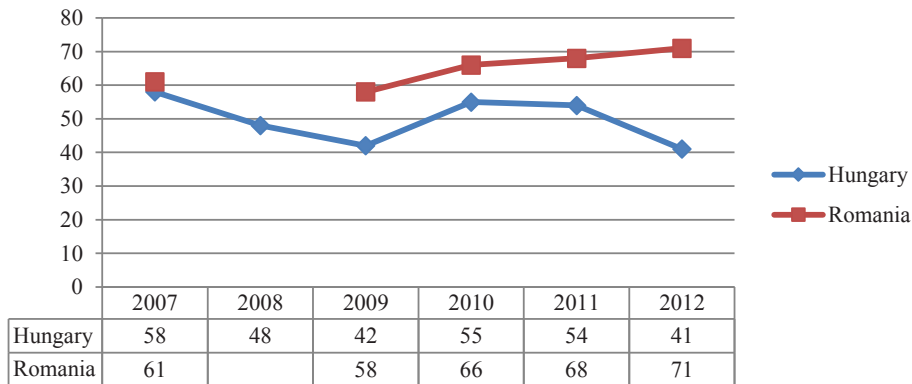


Figure 6. Entrepreneurship as a desirable career choice. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

4.3. Fear of Failure Rate

Both countries registered an increase in the fear of failure rate in 2009, people being more afraid to start a business in these years (probably) due to the economic condition.

Answering the question “If you were to set up a business today, which are the two risks you would be most afraid of?” Hungarians mentioned the risk of losing their property/home 45% (+9% from 2009) and the possibility of going bankrupt 37% (-9% from 2009).

56% of Romanians mentioned the possibility of going bankrupt, the rate registered an increase of 1% from the data collected in 2009, 26% mentioned irregular/not guaranteed income (a decrease of 17% from 43% in 2009) (according to Eurobarometer - Entrepreneurship in the EU and beyond - Analytical report December 2012).

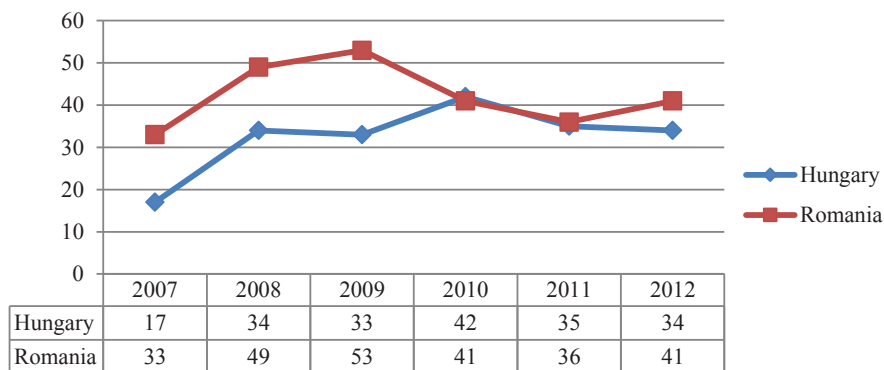


Figure 7. Fear of failure. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

4.4. Perceived Capabilities

Percentage of adult population who believe to have the required skills and knowledge to start a business. This rate marks a slightly decreasing linear trend line for Hungary and a slightly increasing linear trend line for Romania. The year 2008 marked a slow reduction in the perceived capabilities and it seems that from 2009 it recovered and it is slowly growing.

Answering “Why would it not be feasible for you to be self-employed within the next 5 years” 9% of the Hungarians mentioned lack of skills (18% in 2009) and 7% of the Romanians mentioned the lack of skills in 2012 (Eurobarometer - **Entrepreneurship in the EU and beyond** - Analytical report December 2012).

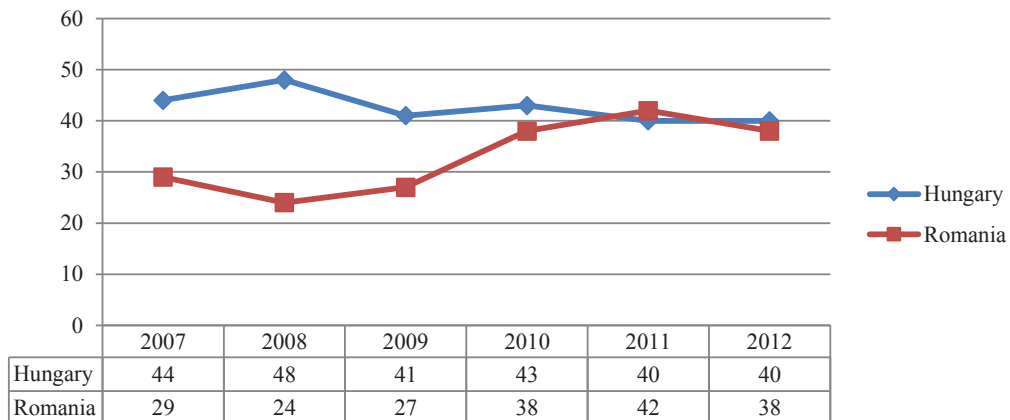


Figure 8. Perceived capabilities. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

4.5. Perceived Opportunities

2010 was a year that marked a peak for this rate in Hungary but in continued decreasing reaching 11%. The year 2009 marked a steep reduction of the perceived opportunities to start a new business venture in Romania probably due to the economic condition, but it continued with an upward trend which reached 37% in 2012, which is a good sign for entrepreneurial activity.

The data from the Eurobarometer study shows that both Hungarians and especially Romanians maybe discouraged to open new business despite the fact that they believe that the area in which they live is offering opportunities for new venture creation. The responses to the difficulties encountered when starting up a business related question were the following:

- Complex administrative procedures - the total level of agreement was of 72% in Hungary and 85% in Romania.
- Lack of available financial support -the total level of agreement was of 86% in Hungary and 90% in Romania.
- Difficulty in obtaining sufficient information on how to start a business the total level of agreement was of 55% in Hungary and 73% in Romania

(Eurobarometer - Entrepreneurship in the EU and beyond - Analytical report December 2012)

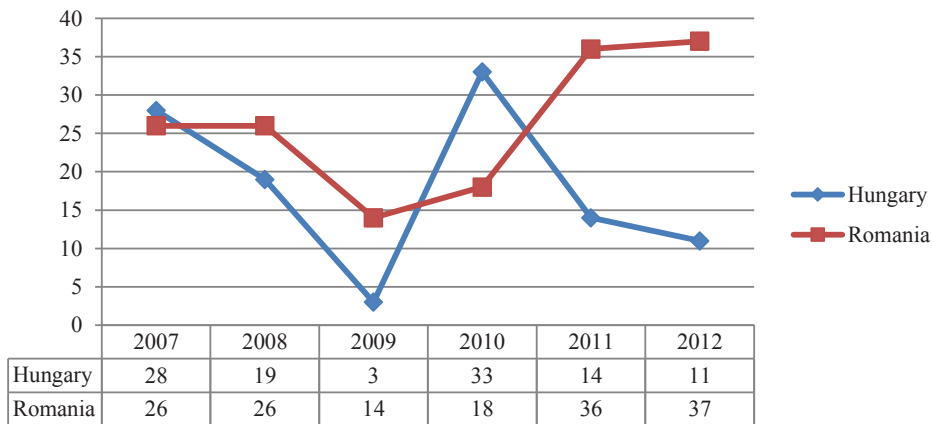


Figure 9. Perceived opportunities. Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

Even though the rate of perceived opportunities increased in Romania a World Bank study situates Romania on 72nd place and Hungary on 53th place regarding the ease of doing business tacking into consideration 10 indicators for this classification.

4.6. Total early-stage Entrepreneurial Activity (TEA)

To sum up this brief presentation of the major indicators developed by GEM we present the TEA – Total early-stage Entrepreneurial activity indicator. Hungary has higher numbers regarding TEA compared with Romania with the exception of the year 2011 when Romanian TEA reached 9,9% in regard with only 6,3% in Hungary.

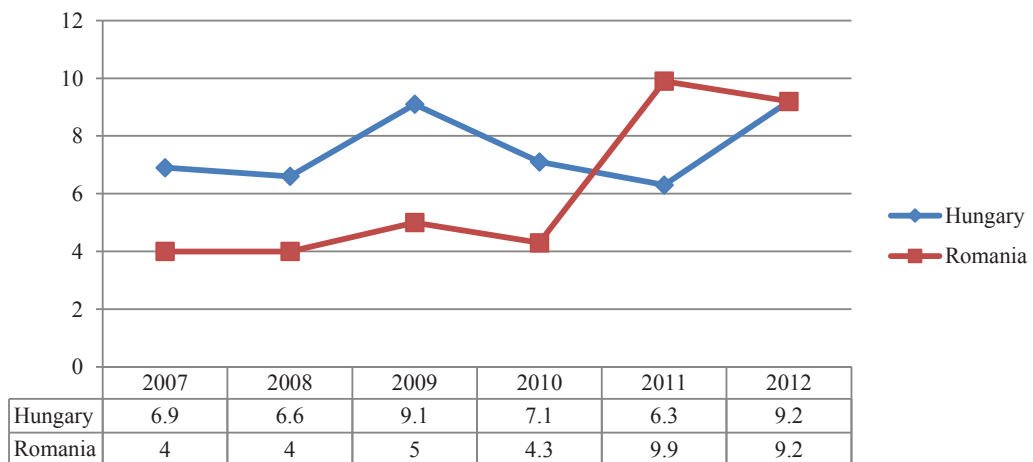


Figure 10. Total early-stage Entrepreneurial Activity (TEA). Source: own calculations based on data from Global Entrepreneurship Research Association (GERA)

5. Conclusion

The paper tried to compare some of the major indicators of GEM from 2 neighboring countries Romania and Hungary. The way people perceive entrepreneurship is an important driver of national entrepreneurial capacity (Davidsson, 1991) and analyzing the attitudes and perceptions toward entrepreneurship plays an important role in better understanding the influence the concept. The findings show that the entrepreneurial intention is higher in Romania from 2011 to 2012 but were situated under the values from Hungary in the period between 2009 and 2010. Romanians also take more into account the possibility to a career in entrepreneurship as a desirable choice in respect with their counterparts in Hungary.

The perceived fear of failure was higher in Romania between 2007 and 2009 and has similar values to Hungary in 2010 and 2011.

Even if the Romanians have a much higher rate of perceived opportunities that the Hungarians (with the exception of year 2010) they do not believe as strongly as their neighbors to have the skills and knowledge to start a business venture (at least in the period 2007-2010, rate in 2011 and 2012 are similar in both countries).

Both rates, new business ownership rate and nascent entrepreneurship rate were higher in Hungary from 2007 to 2010 an they swapped places in 2011 afterwards evolving to similar values in 2012.

Romanians entrepreneurs have higher rates of necessity driven entrepreneurial activity than their Hungarians counterparts (exception the year 2012) meaning that persons who are self-employed chose this career path because they had no other options for work or income.

In regard to the improvement driven opportunity entrepreneurial activity there were more Romanian people claiming that the main driver for being involved in entrepreneurship was being independent only from 2010 and the rate was only slightly bigger. For the period 2007-2009 the rate for improvement driven opportunity entrepreneurial activity was higher in Hungary.

The fact that in Romania the rates of necessity driven tend to go down and the trends of improvement driven rate in going up could suggest that more persons are creating new business venture because they identified an opportunity for increasing their income rather than obtaining one because they had no other source like it happened in years after the fall of communist regime.

The fact that the growth expectations of the entrepreneurial activity in Hungary and Romania are a good sign for the recovery of the economy after the economic downturn. (I mention that 2012 year is an exception for the increase in this rate for Hungary that registered a slightly decrease for 2012).

Hungary had a higher TEA rate (Total early stage entrepreneurial activity) from 2007 to 2010 in 2011 Romania scored a higher TEA rate but in 2012 both countries registered the same value 9.2%

There is no doubt about the fact that the economic recession influenced the entrepreneurial activity in a negative manner. The economical and social costs of the international crisis, didn't mean only losses in the year 2008 and 2009 but also the reduction of the production from many countries, the deceleration of the economic growth in other countries, the loss of the work places and also the loss of credibility of the financial markets and social tensions (Nastase, Kajanus, 2010). But starting with 2010, especially in Romania, we saw some increased rate of new business ownership, nascent entrepreneurship, perceived opportunities that are o good indicator for the economy development. We cannot make strong affirmation about an date of the total recovery of the economy but the fact that more and more opportunities are perceived and transformed into business ventures make us confident that entrepreneurship is a key enabler of economic growth and entrepreneurs could offer the economy a way to surpass more quickly the negative effects generated by the international financial crisis into the economy.

6. Appendix

- **Improvement-Driven Opportunity Entrepreneurial Activity** – Percentage of those involved in TEA who (i) claim to be driven by opportunity as opposed to finding no other option for work; and (ii) who indicate the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income

- **Necessity-Driven Entrepreneurial Activity**– Percentage of those involved in TEA who are involved in entrepreneurship because they had no other option for work
- **New Business Ownership Rate** – Percentage of 18-64 population who are currently a owner-manager of a new business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than three months, but not more than 42 months
- **Nascent Entrepreneurship Rate** – Percentage of 18-64 population who are currently a nascent entrepreneur, i.e., actively involved in setting up a business they will own or co-own; this business has not paid salaries, wages, or any other payments to the owners for more than three months
- **Entrepreneurial Intention** – Percentage of 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who intend to start a business within three years
- **Entrepreneurship as Desirable Career Choice** – Percentage of 18-64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice
- **Fear of Failure Rate** – Percentage of 18-64 population with positive perceived opportunities who indicate that fear of failure would prevent them from setting up a business
- **Perceived Capabilities** – Percentage of 18-64 population who believe to have the required skills and knowledge to start a business
- **Perceived Opportunities** – Percentage of 18-64 who see good opportunities to start a firm in the area where they live
- **Total early-stage Entrepreneurial Activity (TEA)** – Percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business

7. References

- Bosma, N.S., Wennekers, S. and Amorós, J.E. (2012). Global Entrepreneurship Monitor 2011 Extended Global Report: Entrepreneurs and entrepreneurial employees across the globe, Babson Park, MA, US: Babson College, Santiago, Chile: Universidad del Desarrollo, Kuala Lumpur, Malaysia: Universiti Tun Abdul Razak and London, UK: Global Entrepreneurship Research Association.
- Bosma, N., Acs, Z.J., Autio, E., Coduras, A., Levie, J. (2009), "Global Entrepreneurship Monitor. 2008 Executive report", Babson College, Universidad del Desarrollo, London Business School and Global Entrepreneurship Research Consortium (GERA)
- Bygrave, W., Hofer, C.W., „Theorizing about entrepreneurship”, *Entrepreneurship Theory and Practice*, Winter, 1991, pp. 13-22
- Davidsson, P., "Continued Entrepreneurship: Ability, Need, and Opportunity as determinants of Small Firm Growth", *Journal of Business Venturing*, vol. 6(6), 1991, pp. 405-429
- Landström H. - *Pioneers in entrepreneurship and small business research*, 2005 Springer Science + Business Media, Inc.
- Iversen J., Jørgensen R., Malchow-Møller N., (2008) Defining and Measuring Entrepreneurship Foundations and Trends in Entrepreneurship Vol. 4, No. 1, 1–63
- Kelley D. J., Singer S., Herrington M (2011) "Global Entrepreneurship Monitor (GEM) Global Report 2011" Babson College, Babson Park, MA, United States, Universidad del Desarrollo, Santiago, Chile, Universiti Tun Abdul Razak, Kuala Lumpur, Malaysia, London Business School, London, United Kingdom
- Matîș D., Nagy Á, Petru TP, Benyovszki A (2010). Global Entrepreneurship Monitor GEM – Entrepreneurship in Romania 2010 Country Report.
- Matîș D., Nagy A., Pete Ș., Benyovszki A., Petru TP., Györfy LZ., (2011) – Global Entrepreneurship Monitor GEM – Entrepreneurship in Romania 2011 Country Report
- Nagy Á, Pete Ș, Györfy LZ, Petru TP, Benyovszki A (2010). Entrepreneurial Perceptions and Activity – Differences and Similarities in Four Eastern European Countries. *Economie teoretică și aplicată*, 17(8): 15-26.
- Nastase C, Kajanus M., (2010) – The impact of global crisis on SME and entrepreneurship behaviour. Romania –Finland cases. *Amfiteatru Economic*
- Parker S. C. (2009), *The Economics of Entrepreneurship 2009*, Cambridge University Press.
- Savoie Ghe. (2009): *Enterprise, Entrepreneur and Entrepreneurship. The Main Semantic Chain in Contemporary Economics*. University of Pitesti, Romania.
- Schwab, K. (ed.) (2009), "The Global Competitiveness Report 2009-2010", World Economic Forum, Geneva, Switzerland
- Shane, S., Venkataraman, S., „The Promise of Entrepreneurship as a Field of Research", *Academy of Management Review*, vol. 25(1), 2000, pp. 217-226
- Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research, in Katz J., Brockhaus (ed.): *Advances in Entrepreneurship, Firm Emergence and Growth*, vol. 3., pp. 119-138, JAI Press, Greenwich, CT
- Xavier S R, Kelley D, Kew J, Herrington M, Vorderwülbecke A, (2012), *Global Entrepreneurship Monitor – Global Report 2012*
- OECD (2011), *Entrepreneurship at a Glance 2011*, OECD Publishing.
- Flash Eurobarometer 354 (2012) - Entrepreneurship in the EU and beyond – Report June-August 2012